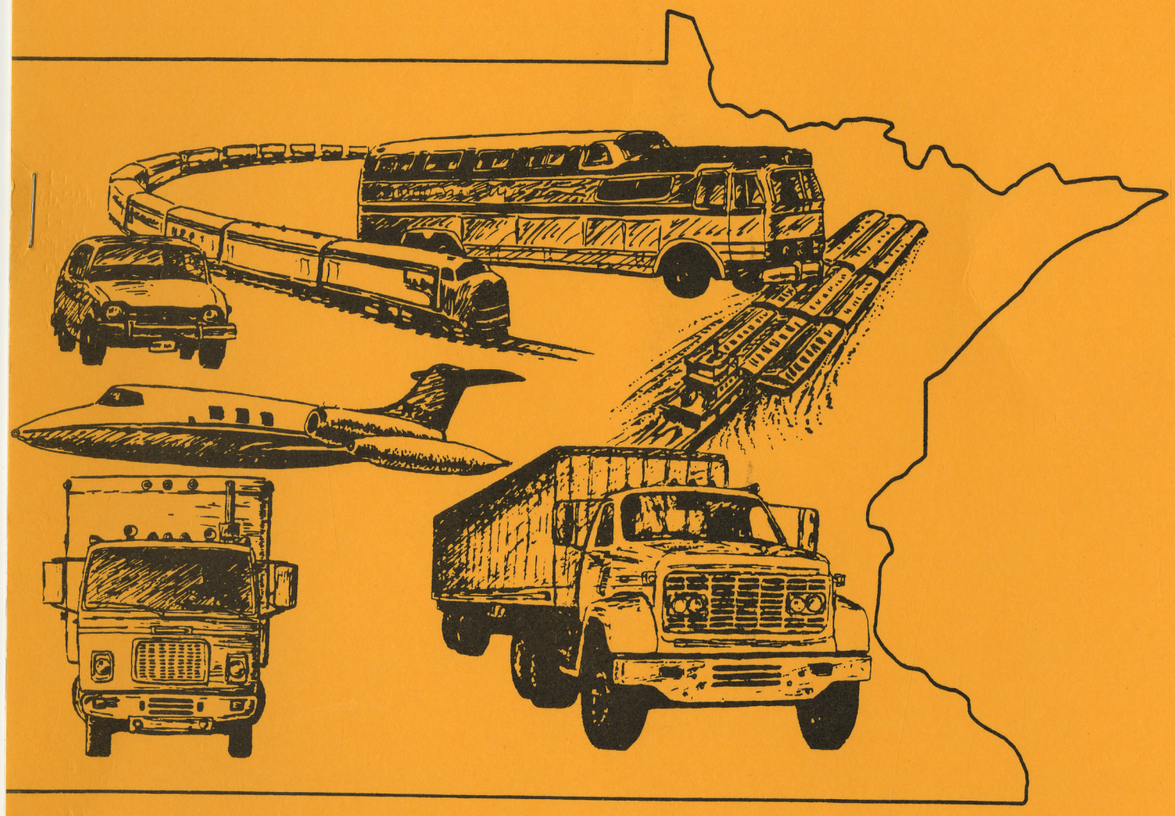
Transportation Analysis

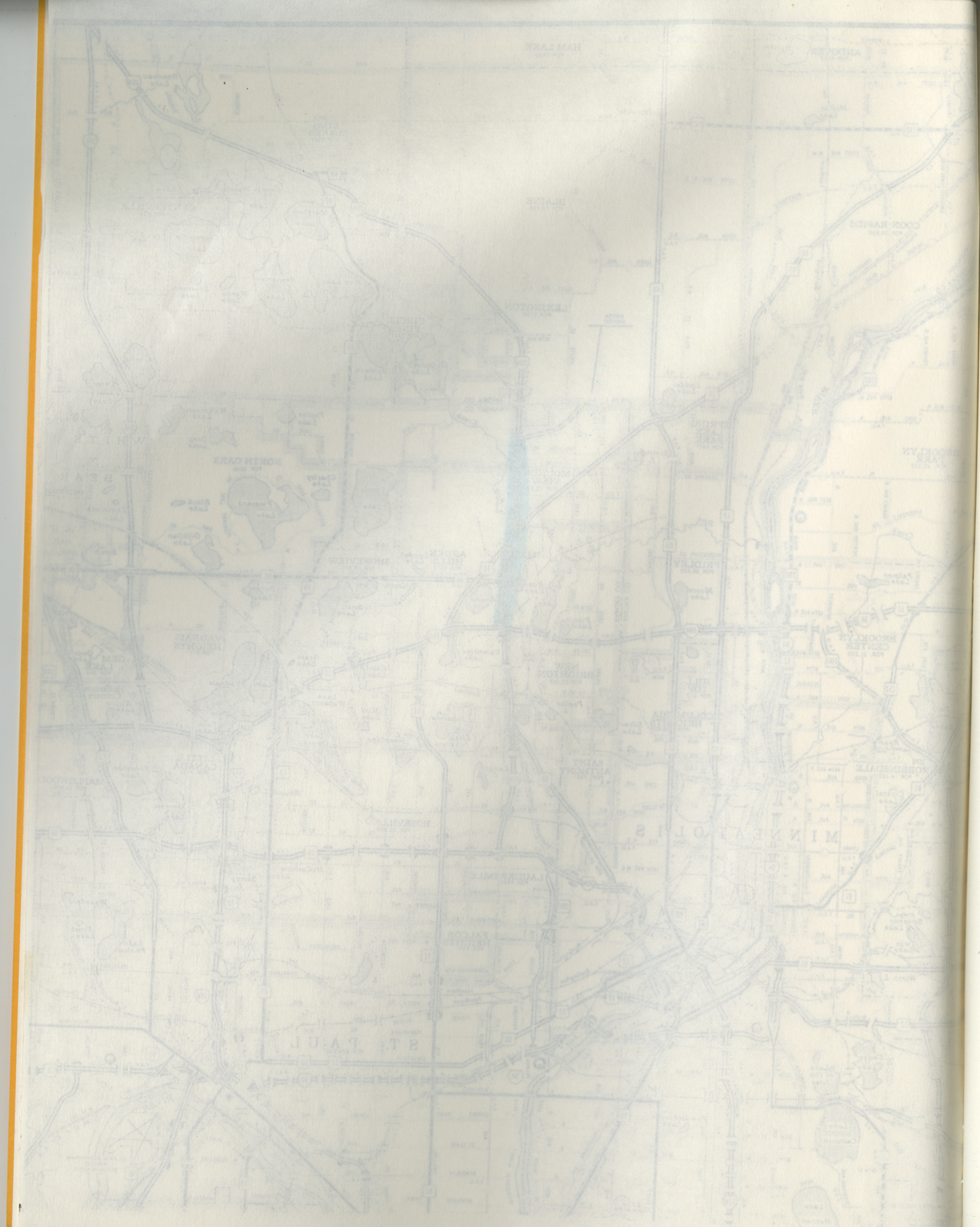
TA-M336

TH 35W from TH 694 to proposed TH 10



PREPARED BY
THE MINNESOTA DEPARTMENT OF TRANSPORTATION
PROGRAM MANAGEMENT DIVISION
TRAFFIC AND COMMODITIES SECTION


ANDOVER
HAM LAKE
Johnsville
McKay Lake
COON RAPIDS
BLAINE
LEXINGTON
CIRCLE PINES
LINO LAKES
CENTERVILLE
George Watch Lake
Marshan Lake
Rice Lake
Reshanau Lake
Peltier Lake
Centerville Lake
Wards Lake
Sherman Lake
Golden Lake
Baldwin Lake
ANOKA CO.
RAMSEY CO.
ANOKA AIRPORT
Laddie Lake
SPRING LAKE PARK
MOUNDS VIEW
BROOKLYN PARK
NORTH OAKS
Pleasant Lake
Charley Lake
Poplar Lake
Turtle Lake
Wilkinson Lake
Deep Lake
Black Lake
Gilfillan Lake
Amelia L.
Otter Lake
WHITE BEAR
Tamarack Lake
Birch L.
FRIDLEY
ARDEN HILLS
Sunfish Lake
SHOREVIEW
Round
Rush Lake
Long L.
Moore Lake
Palmer Lake
Pike Lake
BROOKLYN CENTER
Valentine Lake
Snail Lake
Sucker Lake
Karth L.
NEW BRIGHTON
HILL TOP
COLUMBIA HEIGHTS
Silver Lake
Poplar L.
Jones L.
Island Lake
Grass Lake
VADNAIS HEIGHTS
Vadnais Lake
GEM LAKE
Hoffmans Corners
Willow Lake
Lake Wabasso
Lake Owasso
Lake Johanna
Little Johanna
Josephine
Twin Lake
LITTLE CANADA
Kohlman Lake
MAPLEWOOD
Gervais Lake
Keller
ROBBINSDALE
Crystal Lake
SAINT ANTHONY
Langton L.
ROSEVILLE
Round
MINNEAPOLIS
LAUDERDALE
McCarrons Lake
Sandy
Sweeney Lake
Twin Lake
Wirth L.
FALCON HEIGHTS
Como L.
Lake Phalen
Frost Lake
Wakefield
ST. PAUL
Cedar Lake
Lake of the Isles
Lake Calhoun
Powderhorn Lake
Lake Harriet
Lake Hiawatha
Pickerel
MISSISSIPPI RIVER
ST. PAUL DOWNTOWN AIRPORT (HOLMAN FIELD)
10
35W
35E
47
65
94
694
252
100
36
49
51
52
12
55
61
96
242
169
81
88
280
149
3
56



STATE OF MINNESOTA

Department of Transportation
Room 820

Office Memorandum

TO: Bob Brown
Transportation Analysis Engineer
District 5 - Golden Valley

DATE: 8/20/85

FROM: Allan Pint
Traffic Forecasts Engineer
Traffic Forecasts Unit

PHONE: 296-0217

SUBJECT: TH 35W from Th 694 to proposed TH 10 , TA-M336

This report contains information on the forecasting process, a summary of the data and procedures used for this particular route, an inset map of the project area, and year 2000 traffic forecasts on TH 35W from TH 694 to proposed TH 10. The following information for TH 35W is supplied in Figures 1 and 2:

Average Weekday Traffic (AWDT)

A.M. and P.M. peak hour volumes

Turning movements at the intersection of TH 35W and the following crossroads: TH 694, County Road G, TH 10, County Road H, County Road I and proposed TH 10

Weaving movement diagrams for all weaving sections along TH 35W from TH 694 to proposed Th 10.

Projected traffic volumes for the year 2000 are based on the completion of these construction plans:

1) TH 252 from TH 94,694 to TH 610.

2) TH 610 from proposed TH 169 (Osseo By-Pass) to the junction with proposed TH 10 at University Avenue.

3) Proposed TH 10 from junction TH 47 to junction 35W

4) TH 169 (Osseo By-Pass).

5) TH 694 is upgraded to a 6-lane freeway from TH 94 to TH 35W.

Traffic forecasting is based on a regional travel model of the Twin Cities Metropolitan area maintained by the Minnesota Department of Transportation and the Metropolitan Council. The software package was developed by the Federal Highway Administration and is stored on the state mainframe computer.

The model uses socioeconomic data to project future year traffic and assigns the volumes to a roadway network of the seven county region. Factors such as population, households, employment and land use (based on 1970 and 1980 census data) are used in conjunction with the 1982 Travel Behavior Inventory to determine the generation and distribution of trips in the region.

After data is prepared at the regional level it is allocated to smaller geographical units called Traffic Analysis Zones (TAZ's). The projected year trips are assigned to the roadway network by the minimum time travel path from each origin TAZ to each destination TAZ. The sum of trips on a link resulting from all minimum time travel paths is the assigned volume on the link.

Link volumes represent future year Average Weekday Traffic (AWDT) volumes which are acceptable for regional planning. However, these volumes are further refined manually and by microcomputer to produce more accurate project level forecasts. Subdividing the TAZ's into smaller geographical units, adding a higher level of detail to the network, assigning multiple travel paths, acquiring the most recent traffic data, consulting previous Traffic Analysis Reports and analyzing traffic movements in greater detail are all posssible components of this refinement process.

The following data and procedures were used for this forecast:

1) 2000B zone to zone AWDT and PM peak hour movements assigned to the 2000 road network.

   Zone to zone movements for the TAZ's in the project area were evaluated and reassigned in some instances to reflect smaller geographical units which more accurately represent actual land use and travel patterns.

2) Loaded links and loaded tree analysis of AWDT movements.

Loaded links and trees were studied in order to reroute traffic using minimum time travel paths to multiple paths for critical routes in the project area.

3) The following Traffic Analysis Reports previously prepared by Mn/DOT:

TA-M329: TH 10,610 from Proposed TH 169 to TH 35W, April 1985

TA-M313: TH 94,694 from TH 100 to TH 10, July 1984

The volumes presented in this report are consistent with the volumes in the previously prepared reports listed above except on TH 35W north and south of TH 694 where newly projected volumes are higher than those reported in TA-M313. (For purposes of comparison, the year 2010 volumes in TA-M313 may be factored down to the year 2000 by 0.84.) The increased volumes at these locations are based on the following new data which was not available at the time TA-M313 was prepared:

1) Current ADT and peak hour traffic counts (1984) from the Mn/DOT Data Collection Unit.

2) A revised computer traffic assignment.

4) Current and historical Average Daily Traffic (ADT) and peak hour traffic counts from the Mn/DOT Data Collection Unit and District 5.

Historic trend analyses of traffic counts are used as a guideline in projecting future traffic volumes.

If you have any questions please contact Jim Page at 296-1626.

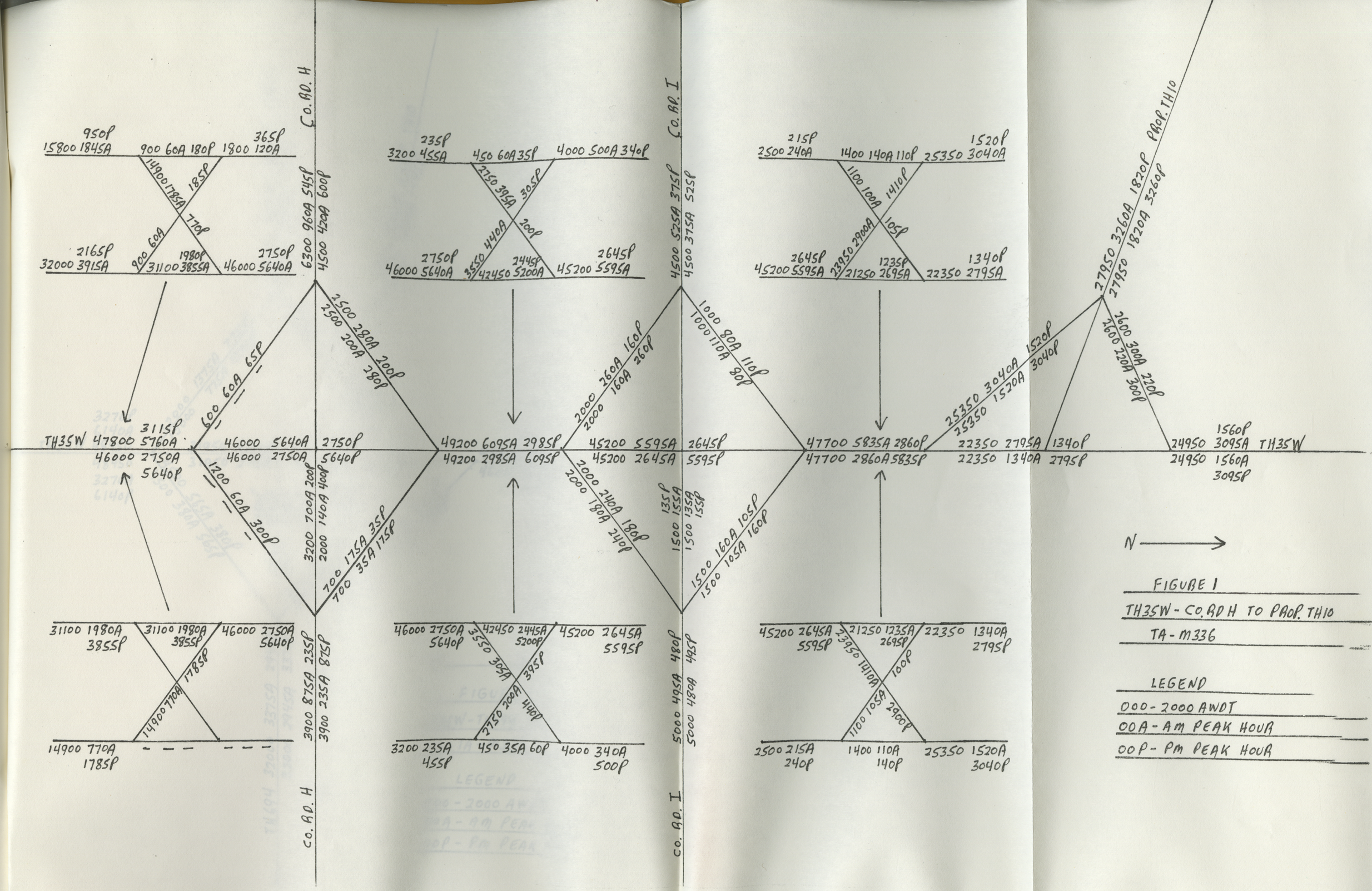


FIGURE 1

TH35W - CO. RD H TO PROP. TH10

TA - M336

LEGEND

000 - 2000 AWDT

00A - AM PEAK HOUR

00P - PM PEAK HOUR

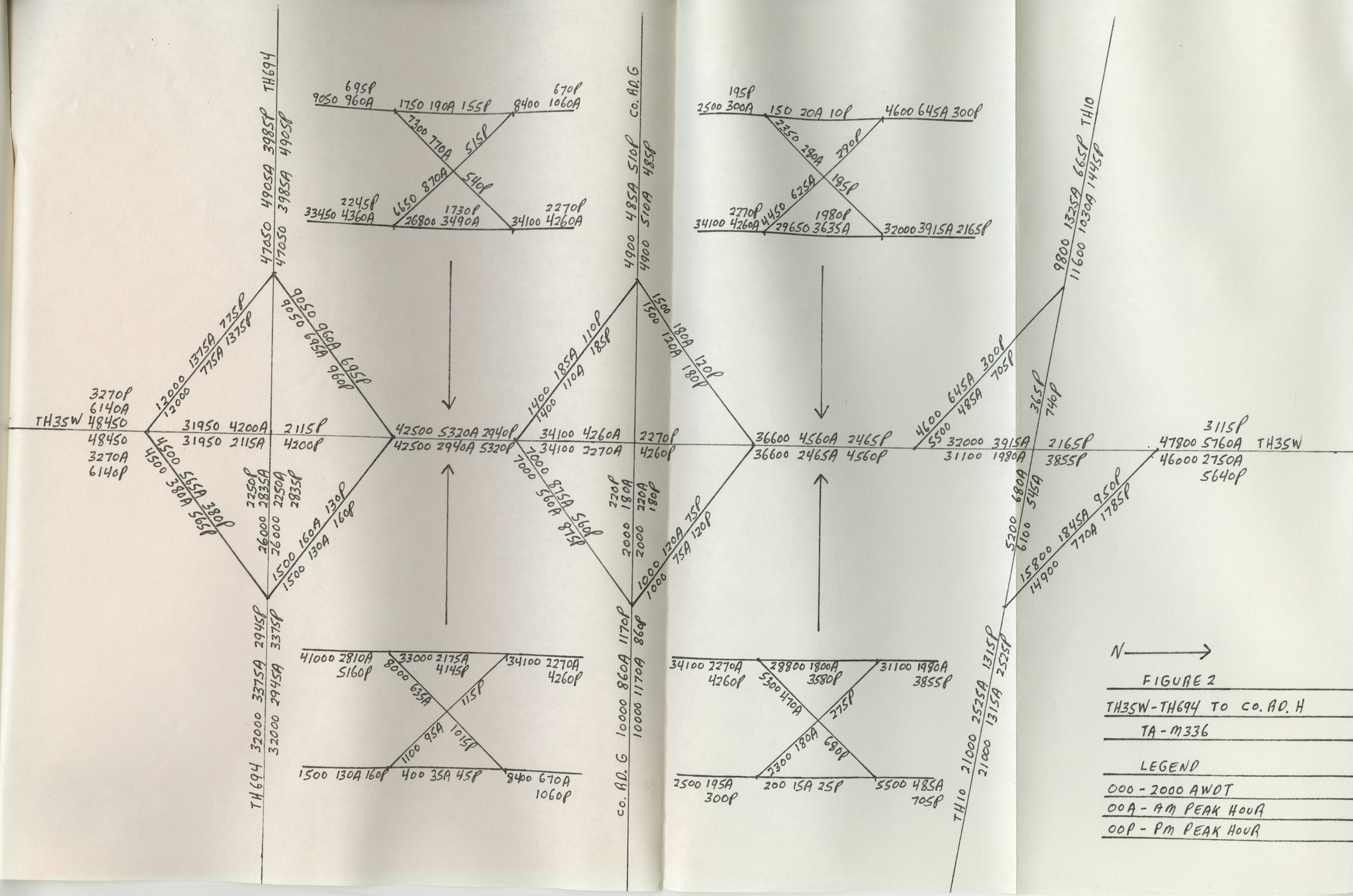


FIGURE 2

TH35W-TH694 TO CO. RD. H

TA-M336

LEGEND

000 - 2000 AWDT

00A - AM PEAK HOUR

00P - PM PEAK HOUR